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(71) Applicant (for all designated States except US): A/S CHR. FABERS FABRIKER [DK/DK]; DK-5856 Ryslinge (DK).		Published With international search report. In English translation (filed in Danish).	
(72) Inventor; and			
(75) Inventor/Applicant (for US only): RYSHOLT, Kim [DK/DK]; Tronderup Dongsvej 5, DK-5772 Kvaerndrup (DK).			
(74) Agent: MAGNUS JENSEN'S SUCC.; P.O.Box 207, DK-3520 Farum (DK).			
(54) Title: ROLLER BLIND			
(57) Abstract			
<p>In a blind, a curtain material (2) is stretched between a tube (1), around which the material can be wound, under the influence of a spring mechanism placed in the tube, and a lower list (3), by a pull at which the blind can be rolled up and down. Projecting end parts of the lower list (3) can co-operate with side guides (4) for the securing of the lower list in predetermined positions. The blind is designed in such a way that there is a longitudinal locking track (5) in the side guides, and that at its ends and outside the plane of the curtain material the lower list (3) has projections protruding into the locking tracks (5), which projections (6) are shaped and dimensioned in such a way that they can slide freely in the locking tracks (5) while the lower list (3) is being pulled away from the tube (1), whereas they are firmly friction-locked in the tracks (5) by the traction of the curtain material on the lower list (3). It is thereby ensured that the curtain material will always be tightly stretched between the tube and the lower list when the blind is partly rolled down to any desired position.</p>			

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ROLLER BLIND

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The present invention concerns a blind where curtain material is stretched between a tube around which the material can be wound, affected by a spring mechanism placed in the tube, and a lower list, where the curtain can be rolled up and down by a pull at the lower list, and where projecting end parts of the lower list can co-operate with side guides for the securing of the lower list in predetermined positions, as a longitudinal locking track is placed in the side guides, and as the lower list has at its ends and outside the plane of the curtain material projections which protrude into the locking tracks.

On known blinds of this kind, cf. for instance US-A-3,911,992, stoppers for co-operation with the projections of the lower list are placed in the locking tracks. By the pull of the curtain material at the lower list the pegs slide in the locking tracks until they reach a stopper in a higher position. The user is thus bound by predetermined settings of the degree of screening.

20 The purpose of the invention is to present a blind of the mentioned kind where the curtain material will always be tightly stretched between the tube and the lower list when the blind is partly rolled down to any desired position.

25 This is achieved according to the invention by the projections being shaped and dimensioned in such a way that they can slide freely in the locking tracks while the lower list is being pulled away from the tube, whereas they are firmly friction-locked in the tracks by the curtain material's pull at the lower list.

30 When the blind is worked out in this way, the spring mechanism always exerts a traction on the curtain material which tends to roll up the blind. When, after rolling down the blind, the user releases his hold of the lower list, the asymmetric shape of the lower list will cause the latter to turn, partly on account of its own weight and partly on account 35 of the traction of the spring mechanism on the curtain material. Hereby the projections at the ends of the lower list will lock themselves in the side guides.

In the following the invention will be explained in more detail in connection with the drawings, where

Fig. 1 shows a part of a blind according to the invention in perspective and with the main parts taken apart,

5 Fig. 2 shows the blind seen from the side and partly cut through while the curtain material is being rolled up or down, and

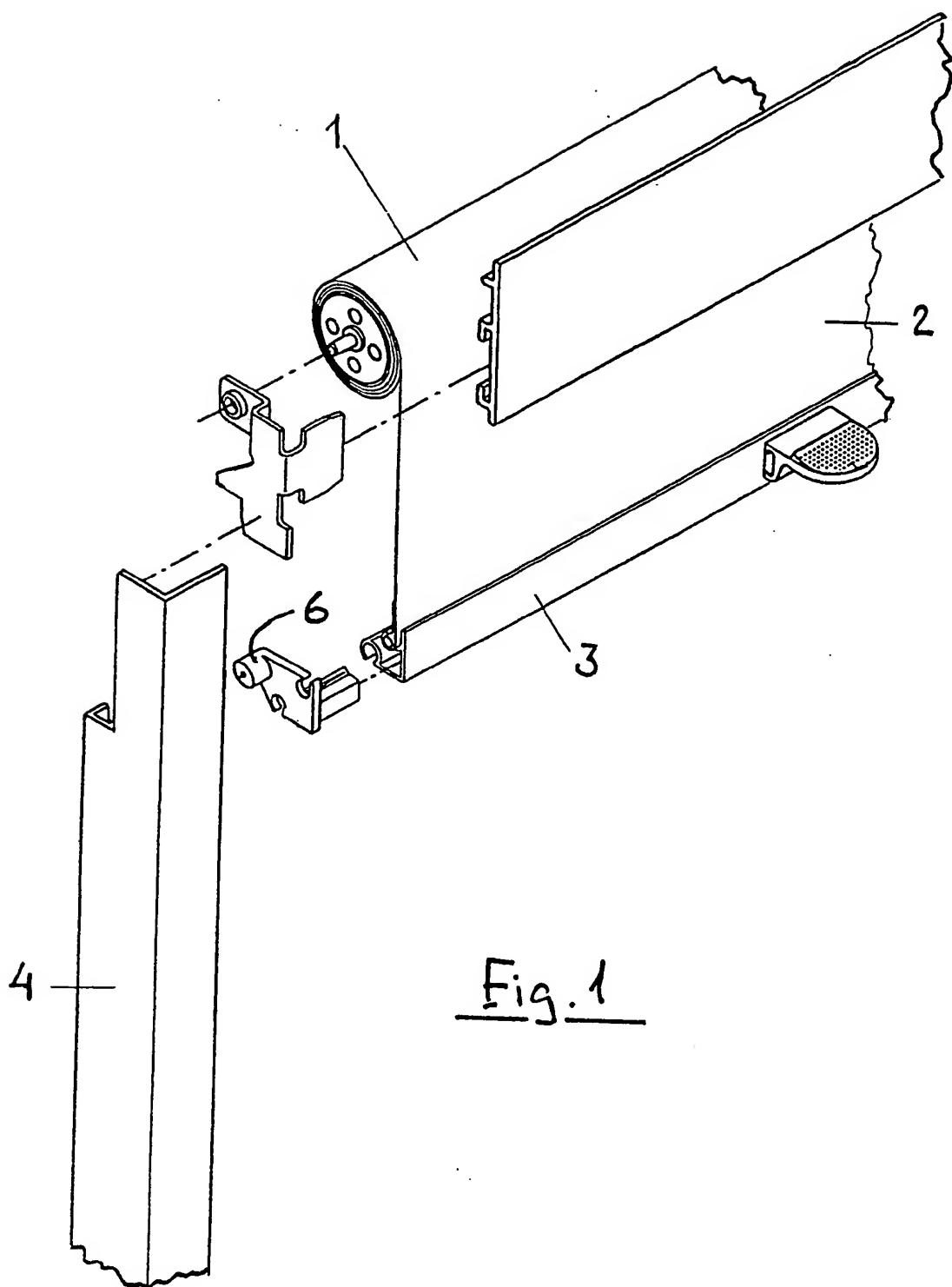
10 Fig. 3 shows the same, but with the lower list of the blind locked in a desired position.

The blind shown in the drawings comprises a tube 1 around which curtain material 2 can be wound, affected by a spring mechanism placed in the tube. The free end of the curtain material 2 is fastened to a lower list 3 in such a way that the blind can be rolled up and down by a pull at the lower list. On both sides of the curtain material a side guide 4 is fastened in an embrasure. In each side guide 4 there is a locking track 5, which is open towards the blind, and the lower list 3 has at its ends and outside the plane of the curtain material 2 projections 6 protruding into the locking tracks. These projections 6 are shaped in such a way that they can slide freely in the locking tracks 5 while the lower list 3 is being pulled away from the tube 1 (Fig. 2). But as soon as the user releases his hold of the lower list the spring mechanism in the tube 1 will tend to draw the lower list 3 towards the tube 1 via the curtain material 2. Owing to the asymmetric shape of the ends of the lower list 3, the lower list will thereby tilt so that the projections 6 are friction-locked in the tracks 5 (Fig. 3). The blind can thus be locked in any desired position.

P A T E N T C L A I M

Blind where a curtain material (2) is stretched between a tube (1), around which the material can be wound, under the influence of a spring mechanism placed in the tube, and a lower list (3), through a pull at which the blind can be rolled up and down, and where projecting end parts of the lower list (3) can co-operate with side guides (4) for securing the lower list in predetermined positions, because there are longitudinal locking tracks (5) in the side guides, and the lower list (3) has at its ends and outside the plane of the curtain material projections protruding into the locking tracks (5), characterized by the fact that the projections (6) are shaped and dimensioned in such a way that they can slide freely in the locking tracks (5) while the lower list (3) is being pulled away from the tube (1), whereas they are firmly friction-locked in the tracks (5) by the traction of the curtain material on the lower list (3).

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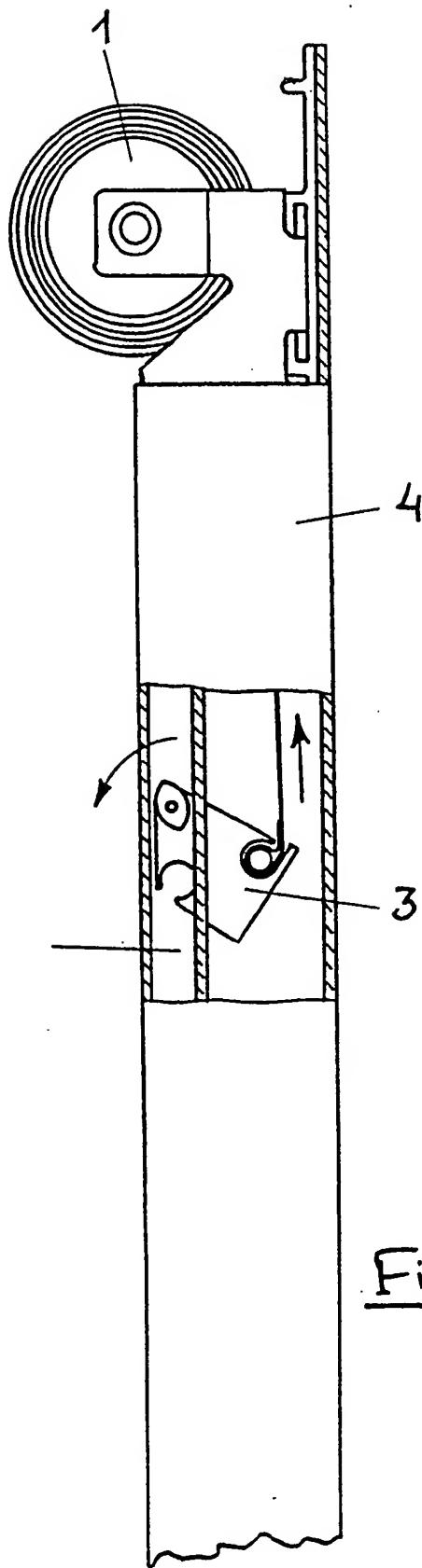


Fig. 2

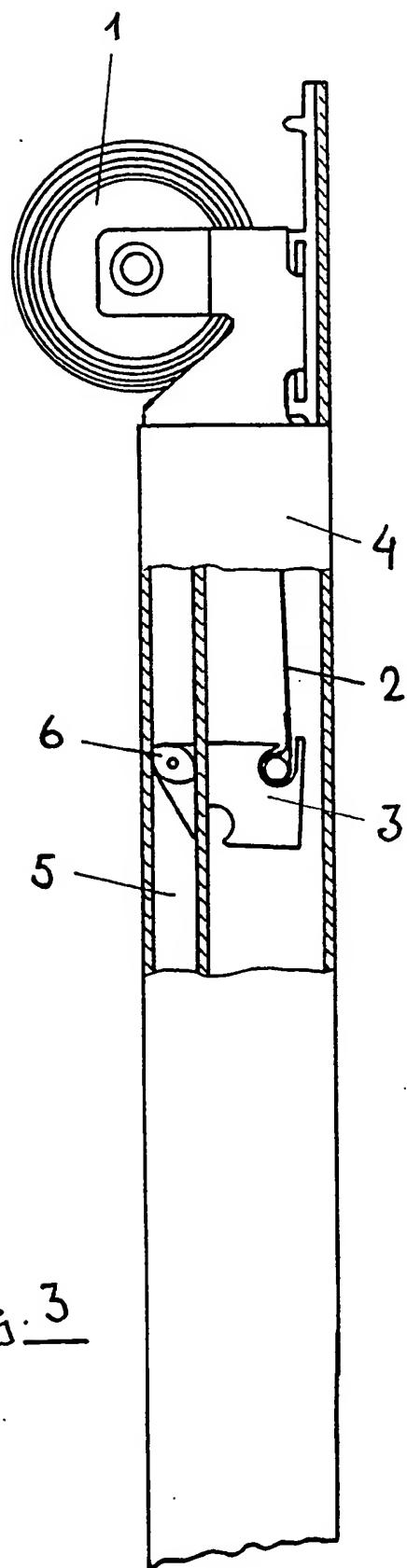


Fig. 3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 93/00407

A. CLASSIFICATION OF SUBJECT MATTER

IPC5: E06B 9/58, E06B 9/90

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC5: E06B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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X	DE, A1, 2626199 (BLEFA AG), 22 December 1977 (22.12.77), page 7, 2nd paragraph - page 9, figures 1, 2	1
A	DE, C, 801044 (FELIX GAERTNER), 21 December 1950 (21.12.50), page 2, line 1 - line 12; page 2, line 50 - line 62, figure 3	1
A	US, A, 776048 (J.B. FISHER), 29 November 1904 (29.11.04), page 1, line 70 - line 92, figure 3	1

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Name and mailing address of the ISA/
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Facsimile No. +46 8 666 02 86

Authorized officer

Jonas Löfgren
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 315789 (J.A. ILLINGWORTH), 14 April 1885 (14.04.85), page 1, line 88 - page 2, line 22, figure 3 -----	1

INTERNATIONAL SEARCH REPORT
Information on patent family members

28/01/94

International application No.
PCT/DK 93/00407

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE-A1- 2626199	22/12/77	NONE	
DE-C- 801044	21/12/50	NONE	
US-A- 776048	29/11/04	NONE	
US-A- 315789	1885	NONE	

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